

## DATA SHEET

### Brocade 5300 Fibre Channel switch Up to 80 ports

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The Brocade® 5300 is an 8 Gb/s fibre channel switch which provides the highest performance, highest availability, scalability and best investment protection to meet the needs of today's consolidated virtual data center. With a flexible architecture that supports 1, 2, 4 and 8 Gbit/s technology with 48, 64, or 80 ports, the Brocade 5300 provides an affordable high-port-count, single-domain solution.

#### A Flexible, Easy-to-Use Switch for a Variety of SAN Environments

As the value and volume of business data continue to rise, organizations need technology solutions that are easy to implement and manage, and that can grow and change with minimal disruption. The Brocade® 5300 Switch is designed to consolidate connectivity in rapidly growing mission-critical environments - combining 1, 2, 4, and 8 Gbit/s technology in configurations of 48, 64, or 80 ports in an efficiently designed 2U package. The combination of density, performance, and "pay-as-you-grow" scalability increases server and storage utilization while reducing complexity for virtualized servers and storage.

#### INDUSTRY-LEADING PERFORMANCE SUPERIOR PERFORMANCE AND DENSITY

To support mission-critical environments, the Brocade 5300 features a non-blocking architecture with as many as 80 ports concurrently active at 8 Gbit/s full duplex with no over-subscription. It also supports new virtualization technologies that are driving efficiency and flexibility benefits. For example, organizations that have deployed virtual server environments require higher levels of connectivity for consolidation and higher levels of performance to cost-effectively meet the demands of virtual data centers.

The density of the Brocade 5300 uniquely enables fan-out from the core of the data center fabric with less than half the number of switch devices to manage compared to traditional 32- or 40-port edge switches.

When deployed as a core SAN fabric switch, the 80-port Brocade 5300 provides a single-switch core footprint that is ideal for SAN fan-out using lower-density Brocade switches. This single-domain solution enables highly efficient server and storage consolidation, reducing the total number of domains to manage in the fabric.

#### ENTERPRISE-CLASS AVAILABILITY FOR BUSINESS CONTINUANCE

The Brocade 5300 provides a reliable SAN foundation by employing enterprise-class availability features such as hot-swappable, redundant, and integrated fan and power supply assemblies. Moreover, hot code load and activation help maximize application uptime with faster system upgrades and maintenance to reduce the dependency on scheduled outages. Combined with a wide range of diagnostic and monitoring functions, these capabilities help provide a highly available SAN environment.

#### SUPERIOR ROI AND INVESTMENT PROTECTION

The Brocade 5300 enables organizations to use 4 Gbit/s SFPs today and upgrade to 8 Gbit/s SFPs, so they can fully leverage their existing IT resources and seamlessly incorporate new capabilities as necessary. To protect investments in operational training and management, organizations can manage the Brocade 5300 with existing applications such as Brocade Enterprise Fabric Connectivity Manager (EFCM) and Brocade Fabric Manager.



#### Main features

- Flexible ports on demand

- Enterprise-class availability features as hot-plug redundant fans and power supplies

#### Benefits

- "Pay-as-you-grow" scalability
- The delivered 48 ports can easily upgrade to 64 or 80 by activating the port license

- Enterprise-Class availability for disaster recovery and business continuance

## TECHNICAL DETAILS

# BROCADE 5300 SWITCH

### Systems Architecture

<b>Fibre Channel ports</b>	80 ports, universal (E, F, and FL)
<b>Scalability</b>	Full fabric architecture with 239 switches maximum
<b>Certified maximum</b>	56 switches, 7 hops; larger fabrics may be certified as required
<b>Performance</b>	1,2,4 and 8 Gbit/s line speed full duplex and auto-sensing of 1, 2, 4 and 8 Gbit/s port speeds; optionally programmable to fixed port speed; speed matching between 1, 2, 4 and 8 Gbit/s ports
<b>ISL Trunking</b>	Up to eight 8 Gbit/s ports per ISL trunk; up to 68 Gbit/s per ISL trunk
<b>Aggregate bandwidth</b>	1360 Gbit/s end to end
<b>Fabric latency</b>	~700 nanoseconds, cut-through routing at 8 Gbit/s
<b>Maximum frame size</b>	2112-byte payload
<b>Classes of service</b>	Class 2, Class 3, Class F (inter-switch frames)
<b>Port types</b>	FL_Port, F_Port, E_Port, M-Port (Mirror Port); self-discovery based on switch type (U_Port)
<b>Data traffic types</b>	Fabric switches supporting unicast and broadcast
<b>Media types</b>	4 Gbit/s: Hot-plug, Brocade Small Form-factor Pluggable (SFP), LC-Connection; Short-Wavelength Laser (SWL) up to 500 Meter; Long-Wavelength Laser (LWL) up to 10 km; Extended Long-Wavelength Laser (ELWL) up to 30 km; Distance depends on fibre channel cable and port speed 8Gbit/s: Hot-plug, Brocade Small Form-factor Pluggable (SFP), LC-Connection Short-Wavelength Laser (SWL) up to 100 Meter; Long-Wavelength Laser (LWL) up to 10 km; Extended Long-Wavelength Laser (ELWL) up to 25 km
<b>Fabric services</b>	Simple Name Server, Registered State Change Notification (RSCN); Brocade Advanced Zoning, and Brocade Web Tools; optional fabric services include the Brocade Advanced ISL Trunking, FC Routing and Adaptive Networking

### Management

<b>Management software supported</b>	SSH,Telnet; HTTPS/SSL,RADIUS; SNMP v3 (FE MIB, FC Management MIB); Web Tools; Fabric Manager; EFCM Standard/Enterprise 9.x third-party applications utilizing the Brocade SMI Agent
<b>Management access</b>	10/100 Ethernet port (RJ-45); serial port (RJ-45); USB Port; In-band through Management Server
<b>Diagnostics</b>	POST and embedded online/offline diagnostics

### Mechanicals

<b>Enclosure</b>	Non-port side to port side (port side exhaust); back-to-front airflow; power from rear; 2.0U, 19-in. EIA-compliant
<b>Size</b>	Width: 42.88 cm Height: 8.60 cm Depth: 61.05 cm
<b>System weight</b>	15.6 kg – dual Power supplies no SFP

**Environmental**

<b>Temperature</b>	Operating: 0°C to 40°C Non-operating: -25°C to 70°C
<b>Humidity</b>	Operating: 10% to 85% non-condensing at 40°C Non-operating: 10% to 95%, non-condensing at 70° C
<b>Altitude</b>	Operating: up to 3000 meters Storage: up to 12 km
<b>Shock</b>	Operating: 20G, 6 ms half-sine Non-operating: 33G, 11 ms, Half sine
<b>Vibration</b>	Operating: 0.5 g sine, 0.4 grms random, 5 to 500 Hz Non-operating: 2.0 g sine, 1.1 grms random, 5 to 500 Hz
<b>Airflow</b>	Maximum airflow 60 CFM Nominal airflow 44 CFM

**Power**

<b>System power consumption</b>	Nominal system draw 260 watts max. 275 watts
<b>Nominal input voltage</b>	85 to 264 VAC, 47 to 63 Hz
<b>Input line frequency</b>	47 to 63 Hz
<b>Input voltage</b>	85 VAC minimum, 264 VAC maximum
<b>BTU rating (80% efficiency)</b>	939 BTU/hr
<b>Inrush current</b>	Maximum of 38 amps for period between 10 to 150 ms at 50°C, hot or cold start

**Safety**

<b>The 5300 complies with the following safety certifications:</b>	UL 60950-1: 2003, First Edition (Underwriters Laboratories) CSA 60950-1-03 (Canadian Standards Association) Nemko EN60950:2000 TUV EN60950:2000 / IEC60950:1999 (TUV "GS" for Germany, TUV "S" for Argentina) GOST (Russia) Low Voltage Directive (73/23/EEC) for CE Marking in European Union
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For more product information please go to <http://www.fujitsu.com/eternus>

**Information about Fujitsu's environmental activities**

[www.fujitsu.com/global/about/environment/](http://www.fujitsu.com/global/about/environment/)



**SUPER Green Product**  
This product has the top-level environmental factor in the comparison with our previous product or product in market.

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